

CLAIMS

We claim:

1. A method of synchronizing cookies across a plurality of computing devices that access a network, said method comprising the steps of:
 - 5 (1) registering a plurality of computing devices as members of an account;
 - (2) maintaining information as to the members of said account at a server on said network;
 - (3) responsive to a change in one or more cookies stored at a first one of said computing devices that is a member of said account, said first member computing device sending a message to a server on said network containing sufficient data from which said one or more cookies can be determined and the account to which said first member computing device corresponds;
 - (4) storing at said server said data and information identifying said account to which they correspond;
 - 15 (5) said server sending said data to other members of said account; and
 - (6) said other member computing devices updating their cookies in accordance with said data received from said server.
2. The method of claim 1 wherein step (5) is performed responsive to a request for said one or more changed cookies received from another computing device that is a member of said account and further including the step of:
 - 20

(7) said member computing devices issuing requests for said changed cookies.

3. The method of claim 1 wherein step (5) comprises the step of:

(5.1) periodically attempting to send said one or more changed cookies to computing devices that are members of said account.

5 4. The method of claim 1 wherein step (5) comprises the steps of:

(5.1) maintaining at said server records of the cookies stored at said computing devices that are members of said account;

(5.2) comparing said records with said data stored at said server that relate to cookies that correspond to said account; and

(5.3) sending to each said computing device that is a member of said account only said data that relates to cookies for which it is determined in step (5.2) that said computing device's corresponding cookie is inconsistent with said data stored at said server.

15 5. The method of claim 2 wherein step (5) comprises the steps of:

(5.1) maintaining at said server records of the cookies stored at said computing devices that are members of said account;

(5.2) comparing said records with said data stored at said server that relate to cookies that correspond to said account; and

10
15
20
25
30
35
40
45
50
55
60
65
70
75
80
85
90
95

(5.3) sending to each said computing device that is a member of said account only said data that relates to cookies for which it is determined in step (5.2) that said computing device's corresponding cookie is inconsistent with said data stored at said server.

5 6. The method of claim 1 wherein step (5) comprises the steps of:

(5.1) maintaining at said server first records of the times at which step (5) was last performed with respect to each said computing device that is a member of said account;

(5.2) maintaining at said server second records of the client machine from which said data was received;

(5.3) comparing said first and second records with said data stored at said server that relate to said account; and

(5.4) sending to each said computing device that is a member of said account only said data that relates to cookies for which it is determined in step (5.3) that (a) said data was not received from said computing device and (b) said data was received at said server after step (5) was last performed with respect to said computing device.

15 7. The method of claim 2 wherein step (5) comprises the steps of:

20 (5.1) maintaining at said server first records of the times at which step (5) was last performed with respect to each said computing device that is a member of said account;

(5.2) maintaining at said server second records of the client machine from which said data was received;

(5.3) comparing said first and second records with said data stored at said server that relate to said account; and

5 (5.4) sending to each said computing device that is a member of said account only said data that relates to cookies for which it is determined in step (5.3) that (a) said data was not received from said computing device and (b) said data was received at said server after step (5) was last performed with respect to said computing device.

8. The method of claim 1 wherein changes to a cookie comprise any of updates to said cookie, creation of said cookie, deletion of said cookie, and rewriting of said cookie.

9. The method of claim 2 wherein step (6) comprises periodically requesting said changed cookies in said account.

15 10. The method of claim 2 wherein step (6) comprises requesting said changed cookies in said account each time said computing device accesses said network.

11. The method of claim 2 wherein step (6) is performed responsive to said member computing device accessing a particular Web site for which it has stored corresponding cookies.

12. The method of claim 10 wherein step (6) comprises, responsive to the accessing of a particular Web site, said member computing device requesting from said server only those changed cookies in said account that correspond to said Web site.

13. The method of claim 1 wherein step (3) is performed responsive to an instruction received by said member computing device to log off of said network.

14. The method of claim 1 wherein step (3) is performed in connection with cookies corresponding to a particular Web site responsive to said member computing device exiting said Web site.

15. The method of claim 1 wherein step (3) is performed periodically.

16. A method of synchronizing cookies across a plurality of computing devices that access a network, said method comprising the steps of:

(1) registering a plurality of computing devices as members of an account;

(2) maintaining information as to the members of said account at a server on said network;

15 (3) receiving messages from said computing devices that are members of said account identifying one or more cookies that have been changed at said computing devices, said messages also containing sufficient data from which said one or more

cookies can be determined and the account to which said first member computing device corresponds;

(4) storing at said server said data and information identifying said account to which they correspond; and

5 (5) said server sending said data to other computing devices that are members
of said account.

17. The method of claim 16 wherein step (5) is performed responsive to a request for changed cookies received from another computing device that is a member of said account.

18. The method of claim 16 wherein step (5) comprises the step of:

(5.1) periodically attempting to send said one or more changed cookies to computing devices that are members of said account

19. The method of claim 16 wherein step (5) comprises the steps of:

15 devices that are members of said account;

- (5.2) comparing said records with said data stored at said server that relate to cookies that correspond to said account; and
- (5.3) sending to each said computing device that is a member of said account only said data that relates to cookies for which it is determined in step (5.2) that said

computing device's corresponding cookie is inconsistent with said data stored at said server.

20. The method of claim 17 wherein step (5) comprises the steps of:

(5.1) maintaining at said server records of the cookies stored at said computing devices that are members of said account;

5 (5.2) comparing said records with said data stored at said server that relate to cookies that correspond to said account; and

(5.3) sending to each said computing device that is a member of said account only said data that relates to cookies for which it is determined in step (5.2) that said computing device's corresponding cookie is inconsistent with said data stored at said server.

21. The method of claim 16 wherein step (5) comprises the steps of:

(5.1) maintaining at said server first records of the times at which step (5) was last performed with respect to each said computing device that is a member of said account;

15

(5.2) maintaining at said server second records of the client machine from which said data was received;

(5.3) comparing said first and second records with said data stored at said server that relate to said account; and

10
15
20
25
30
35
40
45
50
55
60
65
70
75
80
85
90
95

(5.4) sending to each said computing device that is a member of said account only said data that relates to cookies for which it is determined in step (5.3) that (a) said data was not received from said computing device and (b) said data was received at said server after step (5) was last performed with respect to said computing device.

5 22. The method of claim 17 wherein step (5) comprises the steps of:

(5.1) maintaining at said server first records of the times at which step (5) was last performed with respect to each said computing device that is a member of said account;

(5.2) maintaining at said server second records of the client machine from which said data was received;

(5.3) comparing said first and second records with said data stored at said server that relate to said account; and

(5.4) sending to each said computing device that is a member of said account only said data that relates to cookies for which it is determined in step (5.3) that (a) said data was not received from said computing device and (b) said data was received at said server after step (5) was last performed with respect to said computing device.

15 23. The method of claim 16 wherein changes to a cookie comprise any of updates to said cookie, creation of said cookie, and rewriting of said cookie.

24. A method of synchronizing cookies across a plurality of computing devices that access a network, said method comprising the steps of:

(1) registering a plurality of computing devices as members of an account;

(2) responsive to a change in one or more cookies stored at any of said

5 computing devices that are members of said account, said computing device sending a message to a server on said network containing sufficient data from which said one or more cookies can be determined and the account to which said first member computing device corresponds;

(3) said member computing devices receiving said data from a server on said network; and

(4) said member computing devices updating their cookies in accordance with said data.

25. The method of claim 24 further comprising the step of:

(5) said member computing devices issuing requests for said data; and

15 wherein step (3) is performed responsive to step (5).

26. The method of claim 24 wherein a change to a cookie comprises any of updates to said cookie, creation of said cookie, and rewriting of said cookie.

27. The method of claim 25 wherein said member computing devices perform step (5) periodically.

28. The method of claim 25 wherein each of said member computing devices performs step (5) each time said computing device accesses said network.

29. The method of claim 25 wherein each said computing device performs step (5) responsive to said member computing device accessing a particular Web site for 5 which it has stored corresponding cookies.

30. The method of claim 29 wherein, in step (5), said member computing device requests only said that correspond to cookies relating to said Web site.

31. The method of claim 25 wherein step (2) is performed responsive to an instruction received by said member computing device to log off of said network.

32. The method of claim 25 wherein step (2) is performed in connection with cookies corresponding to a particular Web site responsive to said member computing device exiting said Web site.

33. The method of claim 25 wherein step (2) is performed periodically.